

# **Review of ALM Decisions and the Path Forward**

December 2, 2021

# Presenters



**Michael Cohen**  
*Chief Financial Officer*



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*Chief Actuary*



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*Managing Investment  
Director*



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*Deputy Executive Officer,  
Communications &  
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# Agenda

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- Leading up to the ALM decision
- Review of ALM outcome:
  - Discount rate
  - Actuarial assumptions
  - Strategic asset allocation
- Employer contribution rate impacts
- Member impacts
- Implementation timelines
- Q&A

# Leading Up to the Discount Rate Decision

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2021 – **began the ALM review**, which is conducted every 4 years

**21.3% return** for fiscal year 2020-21

Funding Risk Mitigation Policy **triggered**

Discount rate automatically **lowered to 6.8%** on July 1, 2021

New **Capital Market Assumptions adopted** – current portfolio has projected returns of 6.2% over the next 20 years

Board **considered portfolios** with 6.5%, 6.8% and 7.0% discount rates with varying degrees of leverage

# Risk Mitigation Policy Had Already Lowered Discount Rate to 6.8%



**If**  
investment returns outperform discount rate by:

+2 pp → 9%

+7 pp → 14%

+10 pp → 17%

+13 pp → 20%

+17 pp → 24%



**then**  
resulting discount rate will be:

6.95%

6.90%

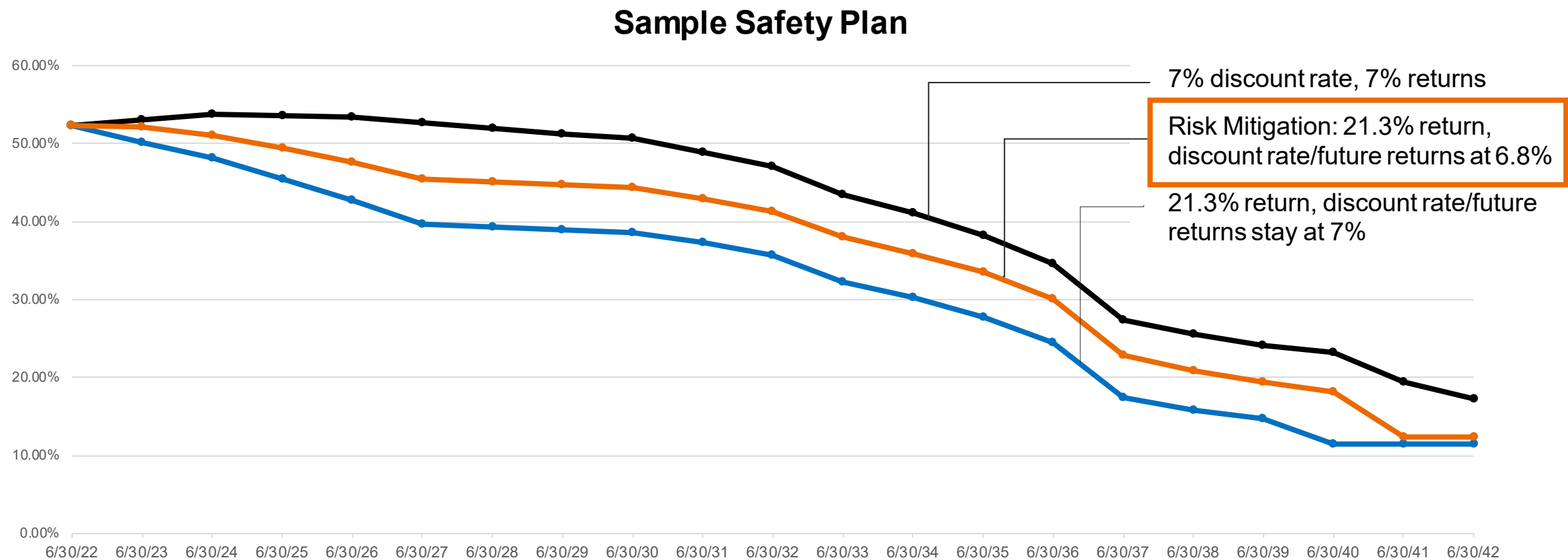
6.85%

6.80%

6.75%

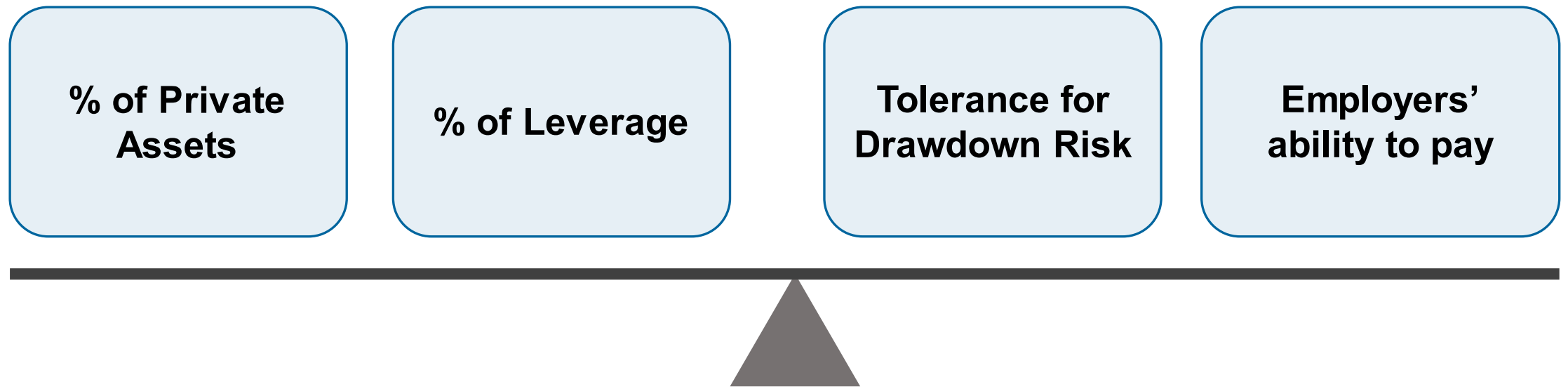
**From Risk  
Mitigation Policy  
triggering**

# 21.3% Return Softened Impact of Discount Rate Reduction for Employers

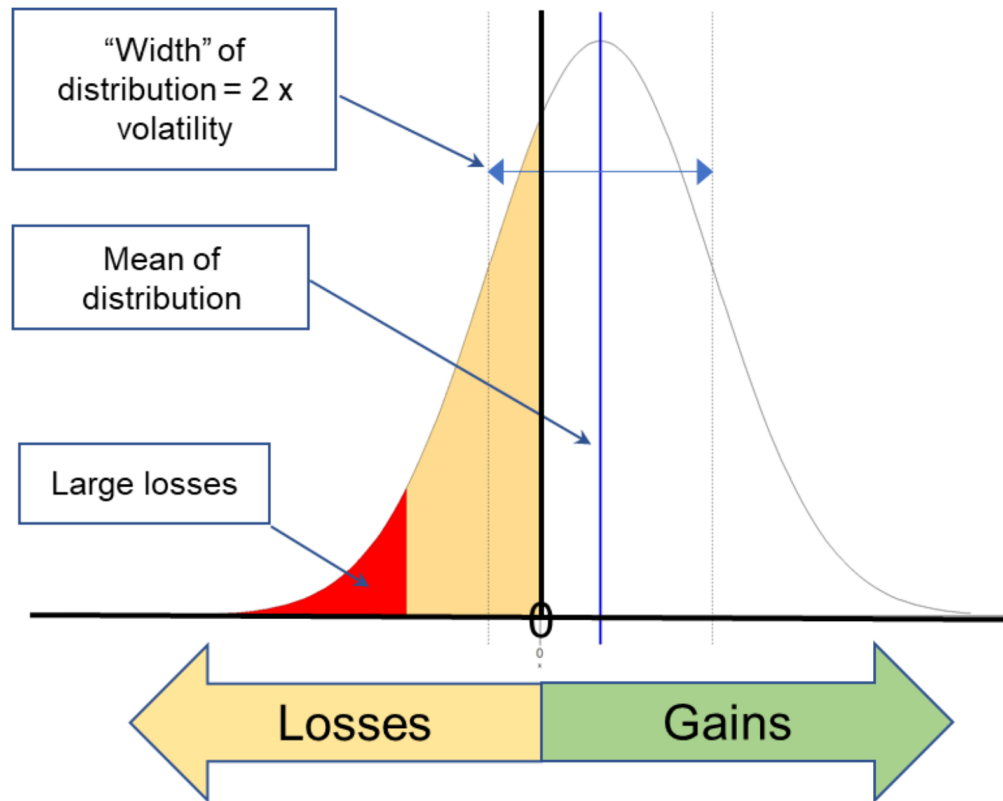


# Balancing Risk & Reward

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# How Much Drawdown Risk and Volatility Should be Tolerated?



- Drawdown definition — the average of the worst 10% of three years losses
- Calculated using thousands of market simulations
- Investment volatility impacts somewhat ameliorated by 5-year ramp of investment gains and losses
- Impact of losses outweighs gains



# Discount Rates and Portfolios Considered

Portfolio Characteristics		Years 1-20		
Name	Leverage	Discount Rate	Drawdown	Volatility
Current	0%	6.2%	22.6%	11.2%
A1	0%	6.5%	20.4%	10.9%
A2	3%	6.5%	20.1%	10.8%
B1	0%	6.8%	23.6%	12.1%
B2	5%	6.8%	23.0%	12.0%
C1	5%	7.0%	25.5%	12.9%

# ALM Outcome

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**Board selected  
6.8% discount rate** with  
5% leverage (Candidate  
Portfolio B2)

**New strategic asset  
allocation:**

- 5% leverage
- Increased allocation  
to private assets

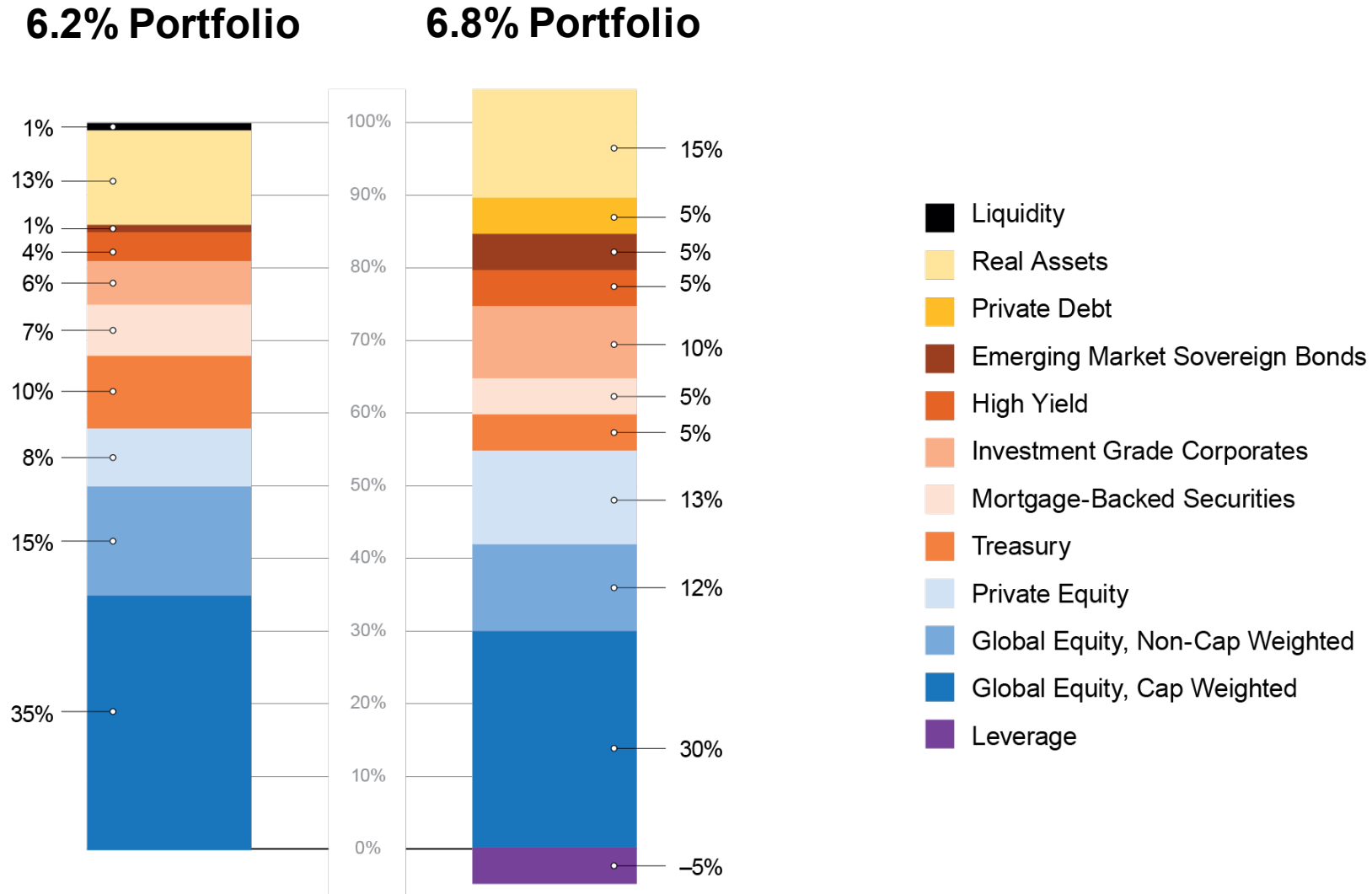
**New actuarial  
assumptions adopted**

# Strategic Asset Allocation

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- Implementation plan for new asset allocation will be delivered to the Board by July 2022, with the intent to:
  - Carefully manage implementation
  - Be opportunistic
  - Mitigate market impact
- Notable Changes:
  - Increased allocation to private assets including private equity, real assets, and private debt from 21% to 33%
  - Addition of 5% leverage
  - Reduction of public equity exposure

# Previous Portfolio (6.2%) and New Portfolio (6.8%)



# What Leverage Does

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## CalPERS & Leverage

- Board approved adding 5% leverage as a strategic asset allocation
- Current leverage is mainly in real estate portfolio and is actively managed
- Leverage is borrowing money to buy assets
- Will take several years to fully implement
- Leverage has been used in moderation for years

## Why Is CalPERS Using Leverage?

- Reduce percentage of CalPERS Fund allocated to riskier assets, including public stocks
- Increase diversification by investing in less-risky assets, including fixed income, to better withstand economic downturns
- Reduces overall risk and volatility compared with a similar portfolio that contains no leverage
- Not being used to increase private asset investments

## What Are the Risks?

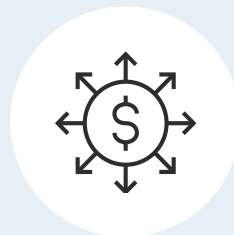
- Leverage adds complexity to managing the fund
- Higher losses in some market conditions

# Why Are Private Assets Critical to the Asset Allocation?

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**Highest returning**  
asset class,  
past and projected



**Portfolio**  
**diversifier**



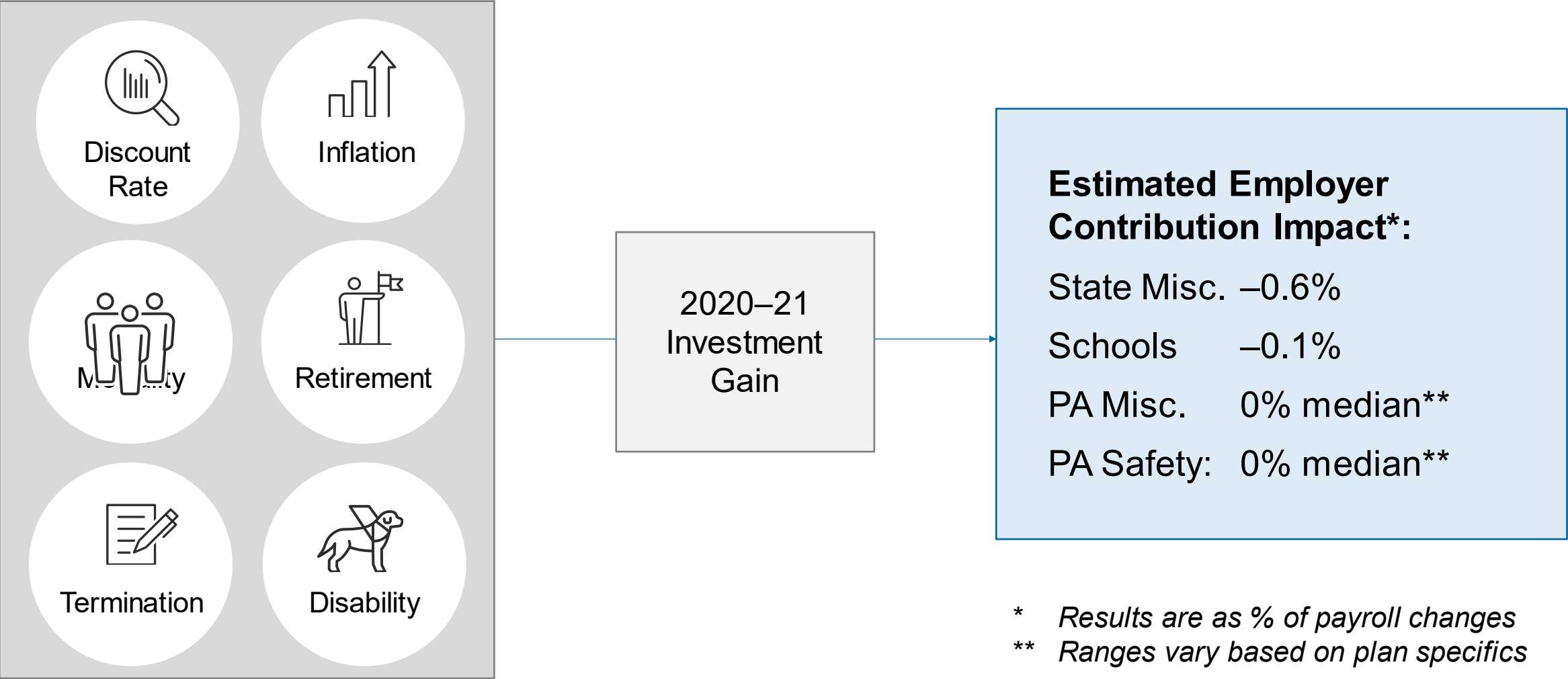
**Access** to different  
parts of the economy  
not readily available  
in public markets

# Discount Rate

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- Discount Rate set by Risk Mitigation Policy affirmed by Board
- Increases normal cost
- Increases UAL (unfunded accrued liability)
- School and State plans – effective 2022–23 fiscal year
- Public agency plans – effective 2023–24 fiscal year

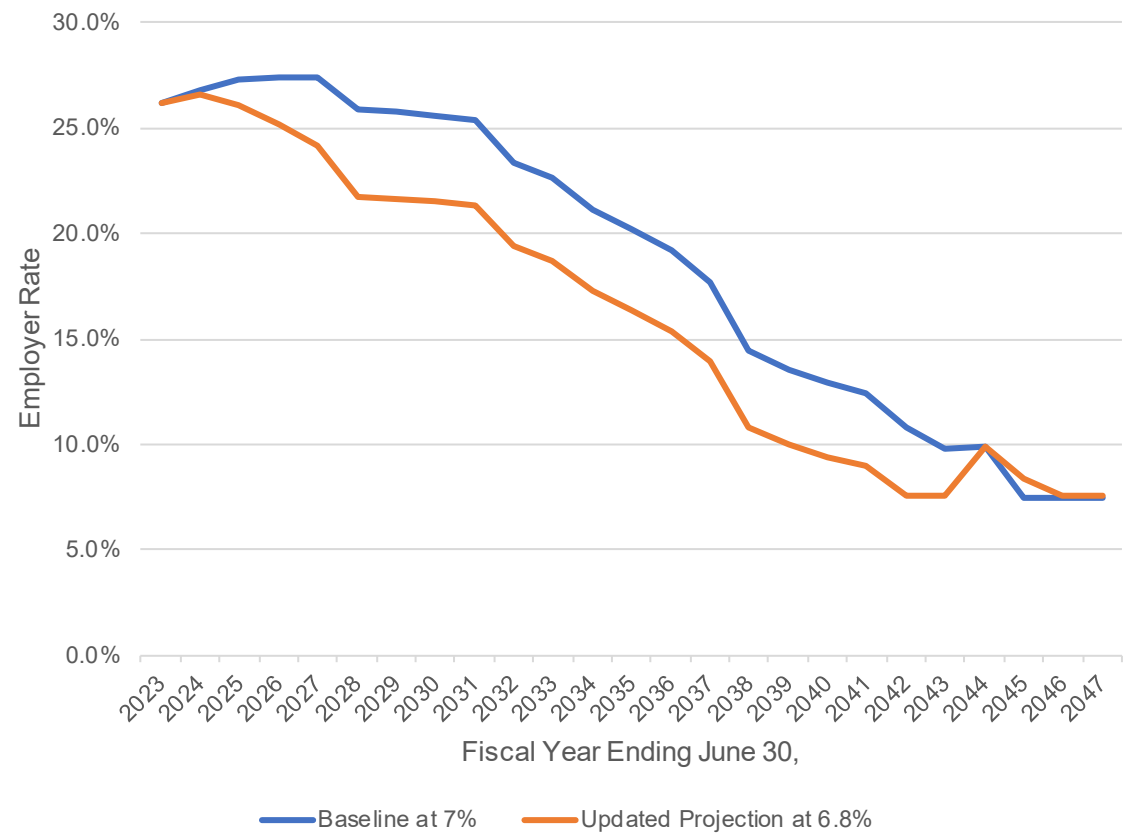
# ALM Outcomes for Employers — Year 1



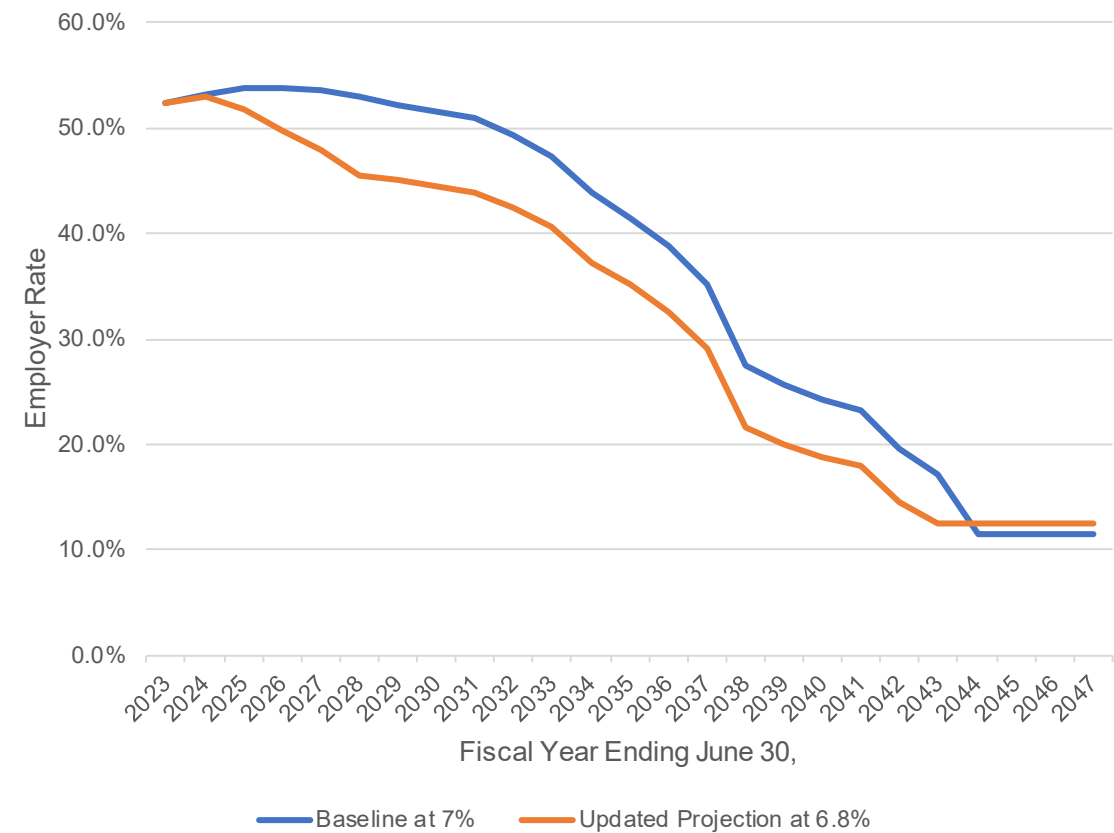


# Employer Contribution Rate Projections

Sample Public Agency Misc. Plan

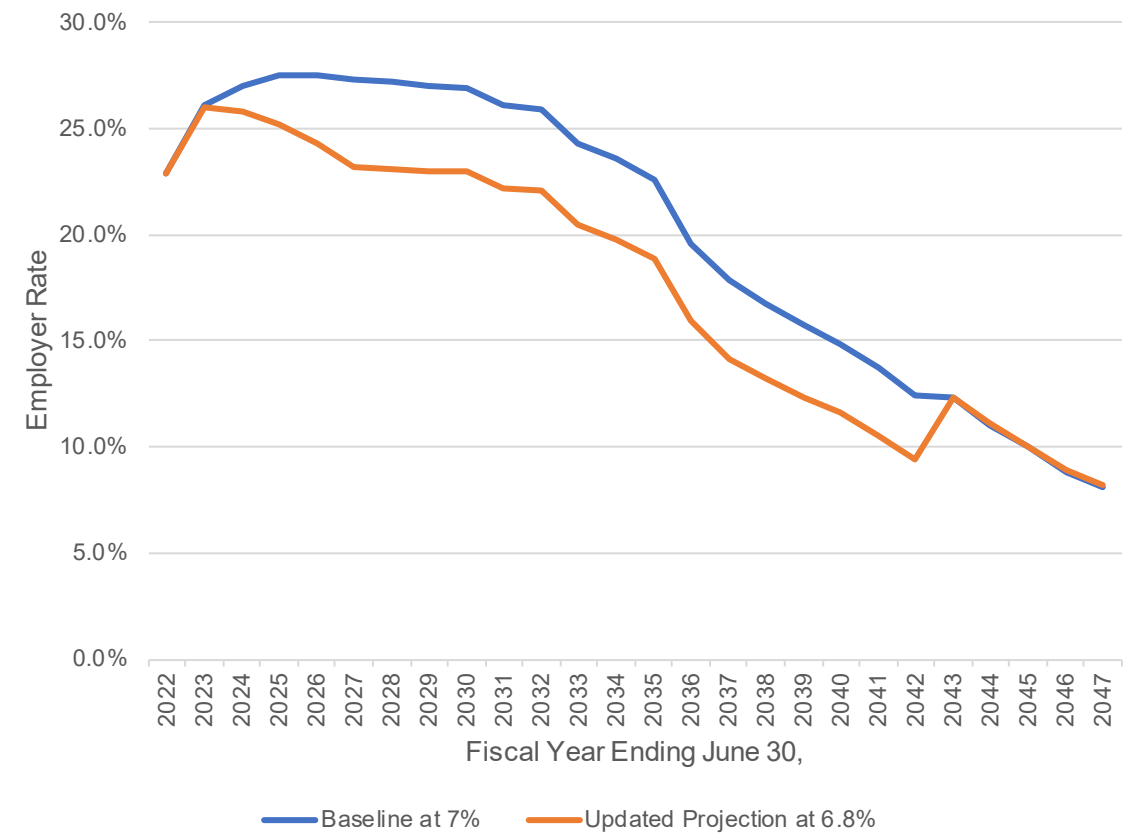


Sample Public Agency Safety Plan

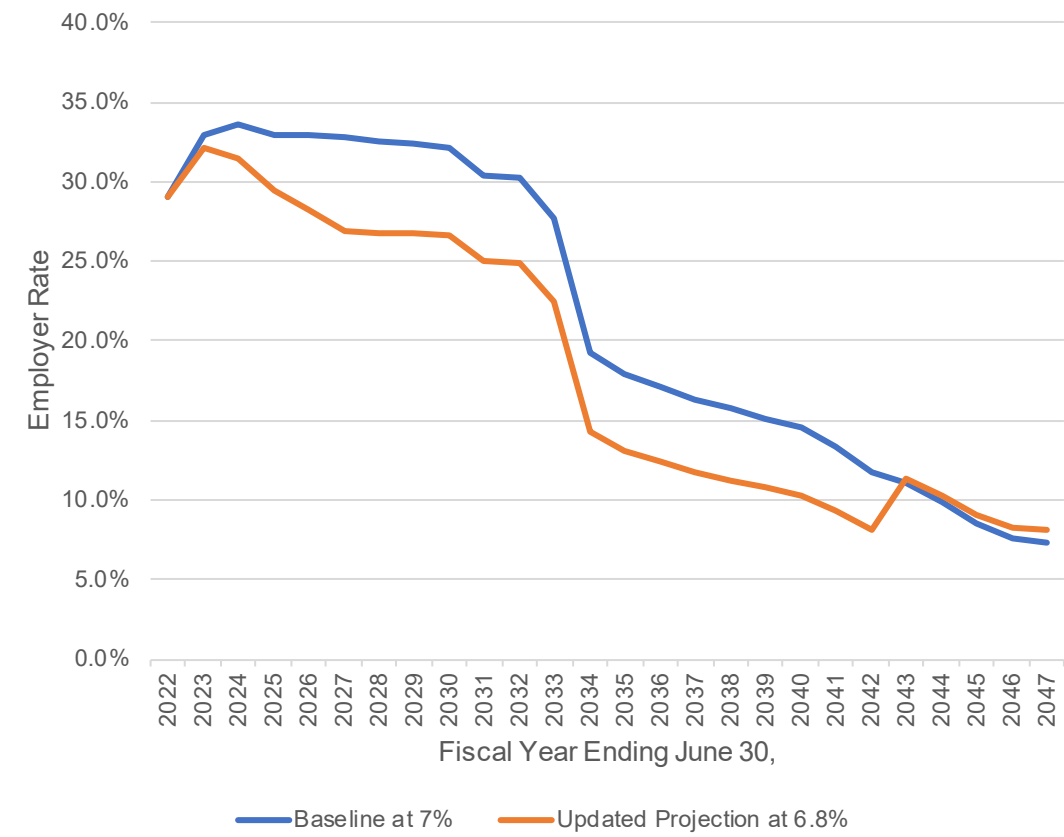


# Employer Contribution Rate Projections

School Plan



State Misc. Plan



# Pension Outlook Tool – Model Any Plan’s Contribution Rate Projections

## Economic Assumptions

Details	Baseline	Model
Discount Rate	7.000%	<b>6.800%</b>
Payroll Growth	2.750%	<b>2.750%</b>
Inflation Rate	2.500%	<b>2.500%</b>

## Investment Scenario Chosen

Rate	Period
21.300%	1
6.800%	1
6.800%	1
6.800%	7
6.800%	20

## Other Assumptions

Details	Baseline	Model
PEPRA	Yes	<b>Yes</b>
Transition Years	15	<b>15</b>
ADP	No	<b>No</b>

## 30 Year Budget

Download the [Fiscal Year Cost and Annual Relative Increase in Cost \(XLSX\)](#).

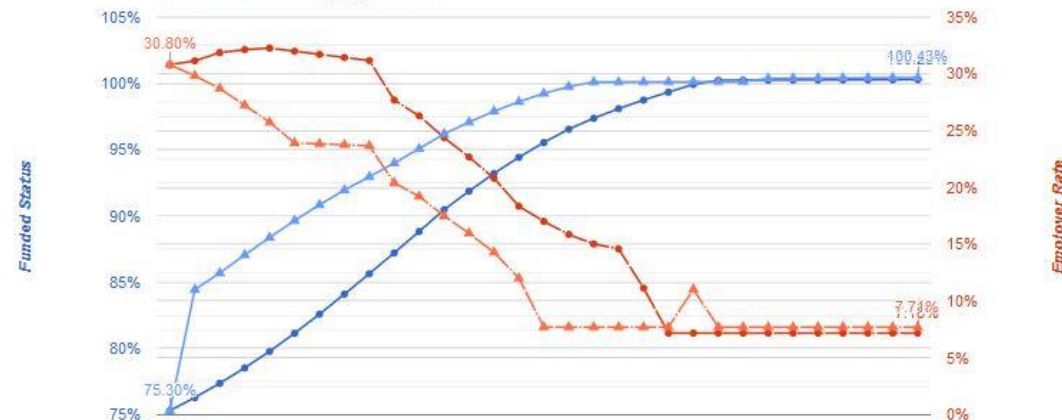
Summary

Funding

Cash Flow

Glossary

### Funded Status and Employer Rates



# How Are CalPERS Members Affected?

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## **All members**

Strengthens long-term sustainability of pension plan

## **Active members**

- Minor technical changes to pension calculation based on retirement date
- Slight increase in service credit purchases based on date of request

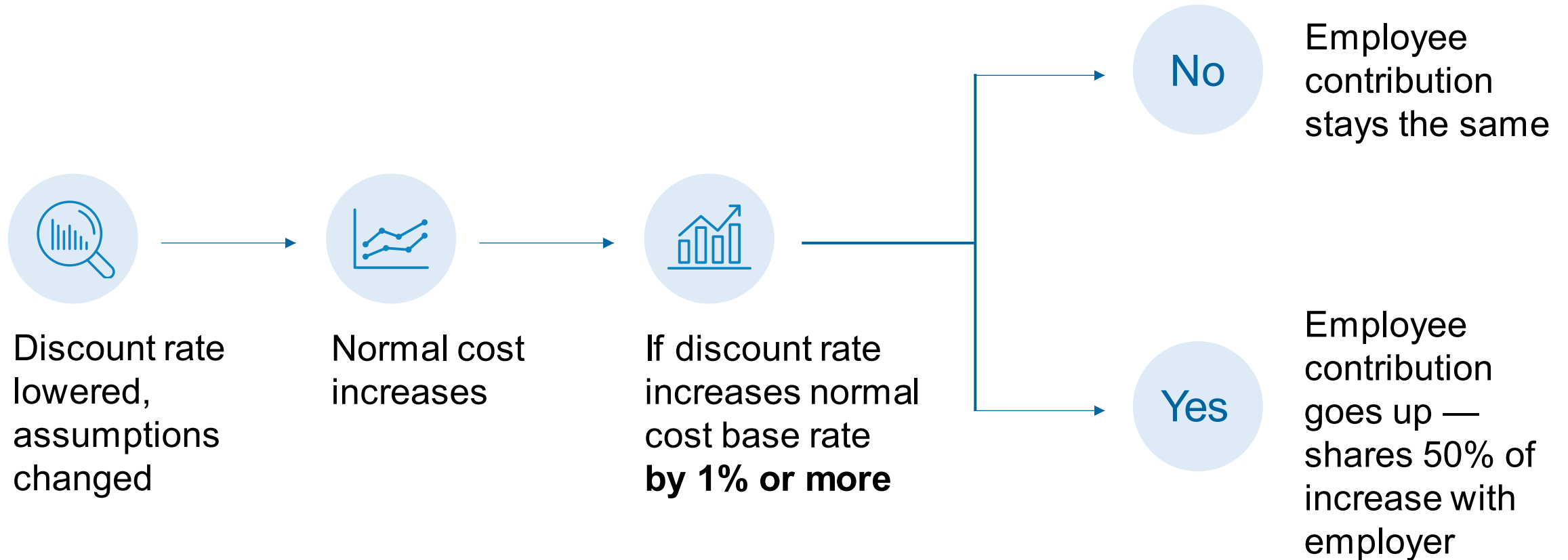
## **Active PEPRA members**

Increase in contributions in most plans, average of 0.8%

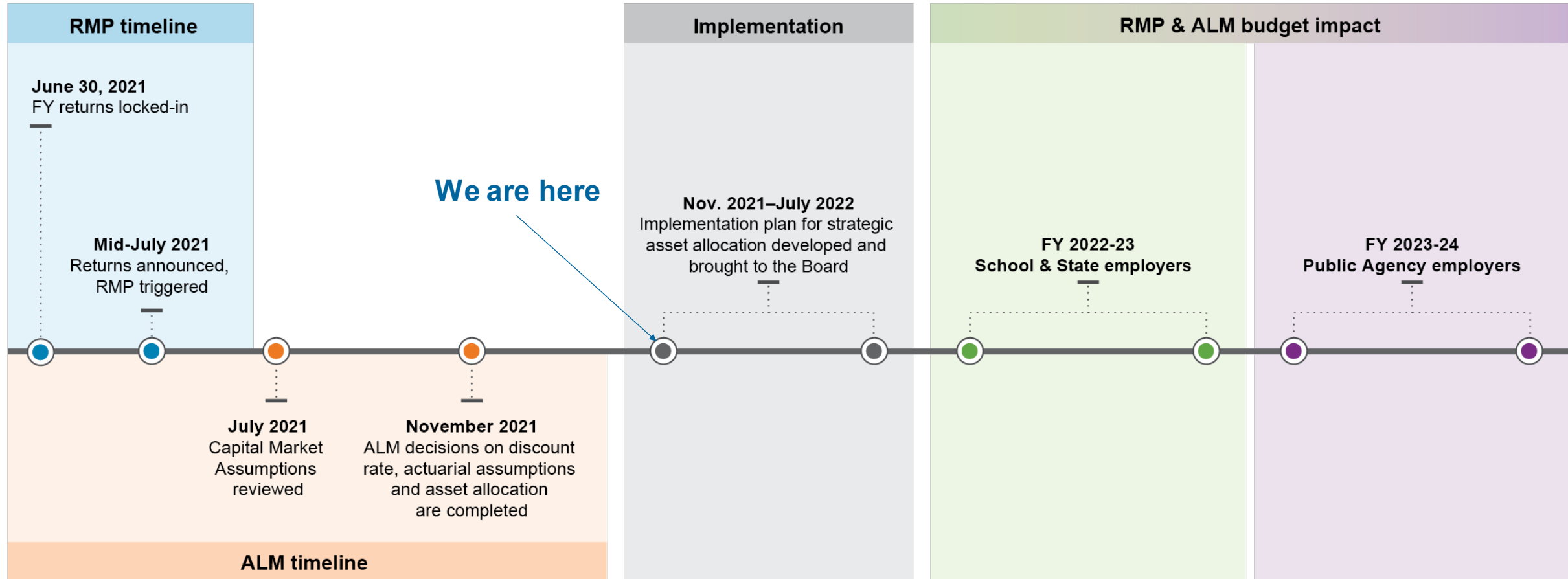
## **Retired members**

No change to pension benefits or COLA

# When Do PEPRA Member Rates Increase?



# Implementation



# Key Timeframes for Rates — State

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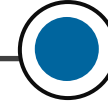
## **January 2022**

Addendum to June 30, 2020 actuarial valuation published online. Includes updated projections based on new assumptions and 2020-21 investment return.



## **April 2022**

Board adopts 2022-23 employer contribution rates. 2022-23 member contribution rates for some groups presented to Board.



## **July 1, 2022**

New employer contribution rates take effect. Some Classic and PEPRA member contribution rates are impacted by assumption changes, varies by bargaining unit.

# Key Timeframes for Rates — Schools

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## **January 2022**

Addendum to June 30, 2020 actuarial valuation published online. Includes updated projections based on new assumptions and 2020-21 investment return.



## **April 2022**

2022-23 employer and PEPRAMember contribution rates presented to Board.



## **July 1, 2022**

New employer contribution rates take effect. Some Classic and PEPRAMember contribution rates are impacted by assumption changes, varies by bargaining unit.



# Key Timeframes for Rates — Public Agencies

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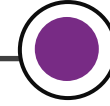
## **December 2021**

Circular letter outlining impact of new assumptions issued.



## **August 2022**

June 30, 2021 actuarial valuations uploaded to myCalPERS. Includes employer contribution requirements for fiscal year 2023-24, and PEPRA member contribution rates for fiscal year 2023-24.



## **July 1, 2023**

New employer and PEPRA member contribution rates take effect.

# Q&A

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